

CRITICAL THINKING TEST IN SOCIOLOGY

*Complete Test
Answer Key
Item Development Manual*

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Test Directions

Read the reading selection below. You can make notes on the reading if you choose.

Next to each paragraph, you will see a number in a box like this.

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The paragraphs are numbered to assist you in answering some of the questions.

Answer the questions. Try to choose the *best* answer.

Write your answer next to the test question.

If the answer asks for justification or a constructed response answer, please limit your answer to the space provided.

You will be allowed to take this test home and return it during the following class. This is not a test of sociological knowledge; it is a test of your ability to think critically using sociological-based critical thinking skills. However, please **DO NOT** collaborate with classmates on this test—that will bias your scores and negate the effective usage of the test.

This test does **NOT** count for a grade.

Reading Selection

All in the Family

Written by John Leo, *U.S. News and World Report*, October 2005

1 It took the media a while to acknowledge that most of Katrina's victims were black. Apparently, it will take longer to mention that most of the victims were women and children. I noticed three commentators who brought up the delicate subject of the mostly missing males--George Will, Gary Bauer, and Thomas Bray, a columnist for the *Detroit News*. Will noted that 76 percent of births to Louisiana's African-Americans are to unmarried women, and probably more than 80 percent in New Orleans, since that is the usual estimate in other inner cities. Will wrote: "That translates into a large and constantly renewed cohort of lightly parented adolescent males, and that translates into chaos, in neighborhoods and schools, come rain or come shine."

2 A good deal of hard evidence shows that this is so. Two decades of research produced a consensus among social scientists of both left and right that family structure has a serious impact on children, even when controlling for income, race, and other variables. In other words, we are not talking about a problem of race but about a problem of family formation or, rather, the lack of it. The best outcomes for children--whether in academic performance, avoidance of crime and drugs, or financial and economic success--are almost invariably produced by married biological parents. The worst results are by never-married women.

High crime

3 In a policy brief released last week, the Washington-based Institute for Marriage and Public Policy, <http://www.marriagedebate.com/pdf/imapp.crimefamstructure.pdf> looked at 23 recent studies dealing with family structure and youth crime. In 19 of the 20 studies that found family structure to have an effect, children from nonintact or single-parent families had a higher rate of crime or delinquency. Neighborhoods with lots of out-of-wedlock births have lots of crime. Ominously, one study said that the more single-parent families there were in a neighborhood, the more crime there was among two-parent kids living around them. Again, these studies are controlled for race.

Among the other findings:

- 4
- Adolescents in single-parent families were almost twice as likely to have pulled a knife or a gun on someone in the past year. This was after controlling for many demographic variables, including race, gender, age, household income, and educational level of parents.
- 5
- In a large sample of students in 315 classrooms in 11 cities, the "single most important variable" in gang involvement was found to be family structure. In other words, the greater the number of parents at home, the lower the level of gang involvement. A study of American Indian families found that living in a two-parent family reduced gang involvement by more than 50 percent.

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- Another study concluded that out-of-wedlock childbearing had a large effect on the rate of arrests for murder, an effect that "seems to have gotten stronger over time."

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- "Adolescents in married, two-biological-parent families generally fare better than children in any of the family types examined here," one study reported. The other family types studied were single mother, cohabiting stepfather, and married stepfather families.

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- One study, judged most important by the institute, found that divorce rates had no relationship to violent crime rates but that out-of-wedlock births had a strong relationship to youth crime--nearly 90 percent of the increase in violent crime between 1973 and 1995 was accounted for by the rise in out-of-wedlock births.

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The upshot of these studies is that America is confronted by a form of poverty that money alone can't cure. Many of us think social breakdown is a result of racism and poverty. Yes, they are factors, but study after study shows that alterations in norms and values are at the heart of economic and behavioral troubles. That's why so much research boils down to the old rule: If you want to avoid poverty, finish high school, don't have kids in your teens, and get married.

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But the conventional wisdom is determined to ignore the evidence. It holds that family fragmentation--sorry, diverse family forms--is positive and here to stay. Peggy Drexler, the author of a new book, *Raising Boys Without Men*, says people who promote intact families are playing a "blame game" against single mothers. She thinks eating dinner regularly with your children is more important than the number or gender of adults in the home. And boys, according to Drexler, have an innate ability to become men, even without a man in the house. (But if boys can raise themselves, why should any father stick around?) The book carries blurbs from various establishment figures. Why not? Her ideas are ordinary ones among our elites.

Test Questions

- 1) Looking at the conceptual framework (or background information) presented by the author, what would you say the author's motivating research question was before he wrote this piece?
 - a. What are the consequences of single-motherhood in America?
 - b. What are the causes of poverty in America?
 - c. What are the causes of social disorder in America?
 - d. What are the causes of racism in America?

- 2) How does Hurricane Katrina relate to family structure?
 - a. Most of Hurricane Katrina's victims were black and poor
 - b. Most of Hurricane Katrina's victims were involved in crime
 - c. Most of Hurricane Katrina's victims were also the victims of social disorder.
 - d. Most of the victims were women and children, and there were few fathers in evidence.

- 3) How many studies found that children from single-parent families had a higher rate of crime or delinquency?
 - a. 19
 - b. 20
 - c. 22
 - d. 23

- 4) What does the author identify as the source of social breakdown?
 - a. Single parent families
 - b. Alterations in norms and values
 - c. Racism
 - d. Poverty

- 5) What is the **main** point of this article?
 - a. Children in single parent families are more likely to become involved with crime.
 - b. Adolescents in single-parent families were almost twice as likely to have pulled a knife or a gun on someone in the past year.
 - c. Alterations in norms and values are at the heart of economic and behavioral troubles.
 - d. Promoting intact families is playing a "blame game" against single parent families.

- 6) Thinking in terms of political orientation, how would you characterize this piece?
- a. Conservative
 - b. Liberal
 - c. Moderate
 - d. Socialist

- 7) In the following statements, indicate whether you think they are *very important* for the author's **main** argument or *not very important*. Then provide one to two sentences of justification for your answer.

Statement 1: "Two decades of research produced a consensus among social scientists of both left and right that family structure has a serious impact on children..." (in paragraph 2)

- A. Important for the author's **main** argument
 - B. Not important for the author's **main** argument
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Statement 2: "It took the media while to acknowledge that most of Katrina's victims were black." (in paragraph 1)

- A. Important for the author's **main** argument
 - B. Not important for the author's **main** argument
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- 8) Which of the following best summarizes the author's general framework for his argument?
- a. Studies have found that race is a major determinant of poverty and negative outcomes for children.
 - b. Studies have found that children who are raised in crime-filled neighborhoods have more negative outcomes than children who live in safe neighborhoods.
 - c. Studies have found that families that eat dinner together are more likely to have positive outcomes than families that do not.
 - d. Studies have found that children raised in single-parent households have more negative outcomes, as measured by crime, gang involvement and poverty.

- 9) What of the following pieces of information would be *most* useful in making the primary claims of this article stronger?
- Research conducted by the author himself
 - More research studies about the connection between race and poverty.
 - Actual numbers and data from the studies cited by the author
 - First-hand interviews with single-parent families
- 10) Which of the following is the *best* piece of evidence in support of the claim that “lightly parented adolescent males translates into chaos in neighborhoods and schools”? (*in paragraph 1*)
- A study that found that adolescents in married, two-biological parent families generally fare better than children in other family types.
 - A study that found that eating dinner with your children is more important than the number or gender of adults in the home.
 - A study that found that boys have the innate ability to raise themselves.
 - A study that found that out-of-wedlock births had a strong relationship to youth crime.
- 11) What is the purpose of citing five studies in the course of this article?
- To engage the reader with interesting statistics about crime and single-parent households.
 - To provide the necessary evidence to support the author’s final conclusion
 - To show the reader how many studies find negative outcomes for children in single-parent homes.
 - To challenge the reader to think about his/her ideas about positive and negative outcomes for children.

12) Look at the following statements from the article. Then find one piece of supporting evidence for this point from the text and list it:

Children in single-parent homes are more likely to join gangs.

Mostly missing males lead to greater amount of neighborhood chaos.

The worst outcomes for children are determined by having a never-married mother.

13) Identify one source of credible authority in this piece and give one reason for their credibility.

14) Using the source of credible authority you identified, explain what makes that source credible? Why should others believe in that authority?

15) Which of the following is the most **valid** objection to the article?

- a. The author does not use data to support his conclusions.
- b. The author provides an overly simple answer to a complex social problem.
- c. The author does not have a clear explanation for the problem of poverty and social disorder.
- d. The author uses emotional language, not fact, to make his points.

16) Which of the following represents a reasonable inference that can be drawn from the data?

- a. Higher rates of poverty lead to greater neighborhood disorder.
- b. Higher rates of racism lead to greater neighborhood disorder.
- c. Higher rates of media coverage lead to greater neighborhood disorder.
- d. Higher rates of single parent families lead to greater neighborhood disorder

- 17) Which of the following statements relies more on personal feeling or values than on facts presented in the article?
- “But conventional wisdom is determined to ignore the evidence” (*in paragraph 10*)
 - “If you want to avoid poverty, finish high school, don’t have kids in your teens, and get married.” (*in paragraph 9*)
 - “Adolescents in single-parent families were almost twice as likely to have pulled a knife or a gun on someone in the past year.” (*in paragraph 4*)
 - “Neighborhoods with lots of out-of-wedlock births have lots of crime.” (*in paragraph 3*)
- 18) What percentage of African-American births in Louisiana are to unmarried women?
- 80
 - 90
 - 76
 - 100
- 19) Aside from the primary conclusion of the author, what is another conclusion that could be drawn from the data?
- Children in single-parent homes are more at risk of living in high crime neighborhoods.
 - Parents who are from single-parent homes are more likely to let their kids get involved with gangs.
 - Parents who are not married are less concerned with living in dangerous neighborhoods than parents who are married.
 - Children in single-parent homes have access to fewer economic and social resources.
- 20) How does the fact that most of Hurricane Katrina’s victims were unmarried women and their children relate to the author’s main argument?
- It shows the prevalence of single parent homes in certain communities in America.
 - It shows the prevalence of single parent homes among African-Americans.
 - It shows the prevalence of single parent homes among hurricane victims.
 - It shows the prevalence of single parent homes in the south.

- 21) Which of the following conclusions is most strongly warranted, given the information in the article?
- a. An increase in single parent homes is related to an increase social breakdown.
 - b. Hurricane Katrina contributed to the rise of single mothers in Louisiana.
 - c. Single parent homes contribute to greater amounts of out-of-wedlock births.
 - d. Poverty and racism are the main causes of social breakdown.
- 22) What is the purpose of citing an article by George Will about adolescent males and chaos?
- a. To show that adolescent males are the cause of chaos in neighborhoods.
 - b. To show that other authors write about the impact of single parent families on neighborhoods.
 - c. To show that chaos in neighborhoods is the cause of forces beyond the control of residents in those neighborhoods.
 - d. To show that other authors such as George Will believe that alterations in norms and values are at the heart of our nation's problems.

24) Restate the author's conclusion in your own words. Then determine if this conclusion is valid given the information provided in the article? You must provide justification for your answer.

25) Do you agree with the conclusion of the study? If yes, provide specific examples from the text or from other sources (personal experience, etc.). If no, propose an alternate conclusion and explain your conclusion with examples from the text or other sources.

Answer Key to Constructed Test

1) C—1 point

2) D—1 point

3) A—1 point

4) B—1 point

5) C—1 point

6) A—1 point

7) Statement 1: A —1 point

Correct answers: —1 point

- The author’s main point is that family structure impacts social disorder/crime/poverty, all of which affect children.
- Two decades of research is a lot of research—evidence
- Both “left and right” agree—that means it’s not a one-sided ideological discussion

Incorrect answers:

- Any justification that does not provide evidence from the article
- Any unclear justification (i.e. “it’s a good point” or “because it makes sense” type answers)

Statement 2: B—1 point

Correct Answers: —1 point

- Race is not an important part of this article or the author’s main argument.
- Hurricane Katrina and her victims are not a main point of this article—the author used that to introduce his point.

Incorrect Answers

- Any justification that does not provide evidence from the article
- Any unclear justification (i.e. “it’s a good point” or “because it makes sense” type answers)

8) D—1 point

9) C—1 point

10) D—1 point

11) B—1 point

12) Statement 1 Correct Answers: “the single most important variable in gang involvement was found to be family structure;” “the greater the number of parents at home, the lower the level of gang involvement;” “living in a two-parent family reduced gang involvement by more than 50 percent.” —1 point

Statement 1 Incorrect Answers: anything that does not deal with gangs and single-parent homes. If students give answers about single-parent homes and crime in general, do not give them a point.

Statement 2 Correct Answers: “two decades of research...family structure has a serious impact on children;” “the best outcomes for children...are almost invariably produced by married biological parents;” “neighborhoods with lots of out-of-wedlock births have lots of crime;” any of the comments from the findings section of the article. —1 point

Statement 2 Incorrect Answers: There are very few incorrect answers; if the test taker provides an answer that does not address males or neighborhood chaos, it would be wrong. If the test taker cited research from Peggy Drexler (at the end of the article) about non-intact families and boys not needing father figures, that would be wrong as well.

Statement 3 Correct Answers: “Adolescents in single-parent families were almost twice as likely to have pulled a knife or a gun on someone;” “any of the gang involvement statements from statement 1, “out-of-wedlock childbearing had a large effect on the rate of arrests for murder;” “adolescents in married, two-biological parent families generally fare better than children in any of the family types measured;” “Divorce rates had no relationship to violent crime rates, but out of wedlock births did” —1 point

Statement 3 Incorrect Answers: Anything off-topic (i.e. does not address single mothers or never-married mothers), anything that contradicts the statement.

Note: There is a difference between single-mothers and never-married mothers—a mother can be single and have been married previously. Therefore, the best answer for statement 3 is the answer about divorce rates and out of wedlock births. However, I do not feel that the author draws a sharp enough distinction between these two concepts throughout the article, nor do I think that, in a setting where we are looking for one “right” answer that we can penalize students for answering with evidence about single parents.

13) One point for identifying a source of authority, one point for giving a correct reason. If a student identifies a source of authority but no reason, it is worth one point.

Sources of authority (with reasons for credibility in parentheses): —2 points

- George Will (commentator, writing about Hurricane Katrina, famous columnist)
- Gary Bauer
- Thomas Bray (columnist for Detroit News).
- Institute for Marriage and Public Policy (Washington-based, research institute, did studies, produced empirical results)
- Cited studies (collected and used data, employed the scientific method, got their results published, studies accepted and promoted by the Institute for Marriage and Public Policy)

- Peggy Drexler (wrote a book, holds “ordinary” ideas among elites) (*note: this is a source of authority that does not agree with the author’s point of view; however, she still represents a source of authority in this piece*)

If students produce any other answers, the scorers can decide if they have merit; however, I believe these represent the entire list of sources of authority in this piece.

14) Use the rubric below—4 points

	Advanced (4)	Proficient (3)	Needs Improvement (2)	Does Not Meet Expectations (1)	No answer or off-topic (0)
General Rubric for Measuring Evaluation	Student can explain in detail his/her reasoning activities, and can fully explain all considerations used in forming his/her conclusions.	Student can explain reasoning activities and considerations used in forming his/her opinions, but without a high degree of detail and accuracy.	Student can explain some reasoning and considerations, but lacks a full ability to defend opinions and conclusions.	Student cannot defend reasoning or considerations	No answer given
Question-specific rubric	Student can explain clearly why the selected source is credible, and can provide clear justification, using examples from the text and well-constructed arguments.	Student can explain why a source is credible, but his/her answer is more vague and utilizes less sophisticated logic.	Student can give a general explanation for the credibility of a source, but shows no sophistication.	Student cannot explain why a source is credible.	

- 15) B—1 point
- 16) D—1 point
- 17) A—1 point
- 18) C—1 point
- 19) D—1 point
- 20) A—1 point
- 21) A—1 point
- 22) B—1 point

23) Use rubric below to grade—4 points

	Advanced (4)	Proficient (3)	Needs Improvement (2)	Does Not Meet Expectations (1)	No Answer or Off-Topic Answer (0)
General Rubric for Inference	Student recognizes inferences and the evidence used or needed to make them plausible and can correctly determine which conclusions should be accepted or rejected based on the information at hand. Student can provide detailed justification of his/her reasoning	Student is able to recognize inferences and evidence, but with a lower degree of sophistication; and shows some ability to determine which conclusions should be accepted or rejected, but does not provide detailed justification.	Student can identify conclusions, but shows little ability to discern if they should be accepted or rejected. Student does not show that he/she knows how to draw inferences; can only recognize them in the readings or work of others	Student does not recognize nor draw inferences; student does not understand how to draw conclusions based on the information given.	No answer given or answer is completely off-topic.
Question-specific rubric	Student can clearly explain the relationship between single parent homes and norms and values. Student can demonstrate that he/she understands the conceptual framework and the conclusions that result from that framework.	Student demonstrates a basic understanding of the relationship between single parent homes and norms/values, but does not demonstrate a high level of sophistication. Student can link the conceptual framework and conclusions, but without a high degree of clarity.	Student shows some understanding of the relationship between single parent homes and norms/values, but cannot fully explain this relationship. Student does not demonstrate a clear understanding of the conceptual framework and conclusions.	Student does not demonstrate understanding of the relationship between single parent homes and norms/values.	No answer.

24) Use rubric below to grade—5 points (1 for restating conclusion; 4 for answer)

Advanced (4)	Proficient (3)	Needs Improvement (2)	Does Not Meet Expectations (1)	No Answer or Off-Topic Answer (0)
Student correctly identifies conclusions and the evidence used or needed to make them plausible and can correctly determine which conclusions should be accepted or rejected based on the information at hand. Student can provide detailed justification of his/her reasoning	Student is able to identify conclusions and evidence, but with a lower degree of sophistication; and shows some ability to determine which conclusions should be accepted or rejected, but does not provide detailed justification.	Student can identify conclusions, but shows little ability to discern if they should be accepted or rejected. Student does not show that he/she knows how to draw inferences; can only recognize them in the readings or work of others	Student does not recognize conclusions; student does not understand how to evaluate if a conclusion should be accepted or rejected.	No answer given or answer is completely off-topic.

Notes to Graders:

- Make sure the test taker can correctly identify the conclusions
- In general, most test takers should say that this is a valid conclusion, because with the information given, it makes sense. However, one might question the conclusion based on a critique of the evidence provided or on outside information or knowledge.
- In this question, graders are looking for test taker ability to defend their reasoning—if they say the conclusion is not valid, then they must have solid reasons to substantiate this.

Scoring: 1 point for restating the conclusion
4 points for the answer.

25) Use rubric below to grade—4 points

Advanced (4)	Proficient (3)	Needs Improvement (2)	Does not meet expectation	No answer or off-topic answer
Student can explain in detail his/her reasoning activities, and can fully explain all considerations used in forming his/her conclusions. Student can explain in detail his/her reasons for accepting or rejecting an assertion.	Student can explain reasoning activities and considerations used in forming his/her opinions, but without a high degree of detail and accuracy. Student can identify reasons for accepting/rejecting an assertion, but without a high degree of evidence.	Student can explain some reasoning and considerations, but lacks a full ability to defend opinions and conclusions.	Student cannot defend reasoning or considerations.	No answer or off-topic answer

Notes to Grader:

- This is a difficult question to grade, but the specific skill being tested is explanation, which means test takers have to have the opportunity to explain their reasoning and conclusions.
- Students can agree or disagree; they must explain their reasoning activities and considerations used to form their conclusions. They must be able to do this in detail.
- There is not necessarily a “right” or “wrong” answer to this question—the scoring is based upon the test taker’s ability to explain his/her reasoning about the his/her conclusions and thought processes. This is why there is not a “question specific” dimension to the rubric—the rubric for explanation is used.

ITEM DEVELOPMENT MANUAL

TABLE OF SPECIFICATIONS

Content-Area Skills (Sociology)

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	Background Information	Question/Hypotheses	Evidence and Data	Conclusions/Main Point
Comprehension	<i>Objective 1</i> Questions 2 and 22	<i>Objective 4</i> Question 1	<i>Objective 6</i> Questions 3 and 18	<i>Objective 8</i> Questions 4 and 5
Interpretation	<i>Objective 2 and 3</i> Questions 7, 20, 6, and 8			
Analysis			<i>Objective 7</i> Questions 10, 11 and 12	
Evaluation				<i>Objective 9 and 10</i> Questions 13-16
Inference		<i>Objective 5</i> Question 9		<i>Objective 11</i> Questions 17, 19, 21, 23, 24
Explanation				<i>Objective 12</i> Question 25

Objective 1

Student can correctly identify the background information utilized by the author to build the main arguments. **(Questions 2, 22)**

Objective 2

Student can explain the importance of the background information utilized by the author. **(Questions 7, 20)**

Objective 3

Student can paraphrase and restate the theoretical frameworks utilized by the author. **(Questions 6, 8)**

Objective 4

Student can correctly identify the research question and/or research hypotheses used in the study **(Question 1)**

Objective 5

Student can accurately identify the information needed to draw plausible conclusions about the research question **(Question 9)**

Objective 6

Student can correctly identify and interpret data in the text. **(Questions 3, 18)**

Objective 7

Student can explain how the author uses data/evidence to support his or her claims. **(Questions 10, 11, 12)**

Objective 8

Student can correctly identify conclusions and/or main points of the piece. **(Questions 4, 5)**

Objective 9

Student can judge the credibility of a source by recognizing and evaluating the factors relevant to assessing credibility **(Questions 13, 14)**

Objective 10

Student can raise questions or objections to the conclusions presented and assess whether or not these points are a significant weakness in the argument. **(Questions 15, 16)**

Objective 11

Student can determine which of several possible conclusions is most strongly warranted or supported by the information at hand, or which should be rejected, or regarded as less plausible by the information given. **(Questions 17, 19, 21, 23, 24)**

Objective 12

Student can give reasons for accepting the claims or assertions of the study and can defend their reasoning regarding the strength/weakness of the conclusions, providing evidence upon which their reasoning was based. **(Question 25)**

PROCEDURAL ISSUES

Choice of Reading Selection

A reading selection is required because this is a test of thinking skills as applied to a specific topic—not a test of course knowledge.

This reading was selected for the following reasons:

- It presents an issue—causes of social disorder—that is a common topic for discussion within the discipline of sociology without being technically complicated.
- It uses data and research.
- It is a manageable length and reading difficulty level.

Scoring for the Test

- Each multiple choice answer is worth one point.
- All extended constructed responses are worth four points.
- Any deviation from this scoring is outlined in the individual item explanation.
- Total points: 48 points.

Scoring Constructed Response Items

The following procedures are recommended for scoring this test:

- Use at least two graders on all tests. If this is not possible, select a sample of tests and grade them together, with all graders agreeing on scores. Grade all tests individually, then select a sample (approximately 30% of the tests) that will be graded by two people and match scores. If there is a wide discrepancy, regrade tests.
- Rubrics have been provided for all constructed response questions.
- Multiple choice questions are worth one point; short constructed response are worth the points indicated; constructed responses are worth four points.

Directions for Administration

- I recommend allowing students to take the test home. A time limit is not necessary in this test.
- One issue with allowing students to take the test home is that they may collaborate, which would ruin the validity of their scores. To avoid this, explain to students the importance of working alone, and emphasize the fact that this test is not for a grade.
- Give the students the test and answer any questions about the set-up, the questions, and the format of the reading.
- Students can write answers directly on the test.

Critical Thinking Definition and Conceptualization.

This test is developed based on a specific definition and conceptualization of critical thinking. See attached definition and framework for more detail.

QUESTION 1

Objective 4: Student can correctly identify the research question and/or research hypotheses used in the study

Looking at the conceptual framework (or background information) presented by the author, what would you say the author's motivating research question was before he wrote this piece?

- A. What are the causes of social disorder in America?
- B. What are the causes of single-motherhood in America?
- C. What are the causes of poverty in America?
- D. What are the causes of racism in America?

Scoring and Explanation

- A. Correct
- B. Single motherhood is used to explain social disorder, but the causes of single motherhood are not explained in the article.
- C. Single motherhood and poverty are studied; but the question motivating the author is not the causes of poverty ALONE—he is interested in social disorder more broadly (crime, gang involvement, poverty, etc.)
- D. Race is not a key element to this piece, but is mentioned and may distract an unsophisticated reader.

QUESTION 2

Objective 1: Student can correctly identify the background information utilized by the author to build the main arguments

How does Hurricane Katrina relate to family structure?

- A. Most of the victims were women and children, and there were few fathers in evidence.
- B. Most of Hurricane Katrina's victims were black and poor
- C. Most of Hurricane Katrina's victims were involved in crime
- D. Most of Hurricane Katrina's victims were also the victims of social disorder.

Explanation and Scoring

- A. Correct
- B. A test taker might correctly interpret the first line of paragraph one (most of Katrina's victims were black), but neither race nor poverty relate to family structure in this article.
- C. A test taker might draw a connection between Hurricane Katrina's victims and crime, but the author does not relate the two in this study.
- D. A test taker might take conclusion of the study and apply it to Hurricane Katrina in a cause and effect sort of relationship; this is wrong because whether or not they were the victims of social disorder does not relate to the author's main argument about family structure.

QUESTION 3

Objective 6: Student can correctly identify and interpret data in the text.

How many studies found that children from single-parent families had a higher rate of crime or delinquency?

- A. 19
- B. 20
- C. 22
- D. 23

Scoring and Explanation

- A. Correct
- B. 19 out of 20 studies found that family structure had an effect on youth crime; not reading carefully could cause a test taker to mistakenly think there were 20 studies. One study apparently found children from non-intact families did not have a higher rate of crime.
- C. Careless reading or math, or trying to infer too much from the data could yield this answer.
- D. There were 23 studies conducted about family structure and youth crime.

QUESTION 4

Objective 8: Student can correctly identify conclusions and/or main points of the piece.

What does the author identify as the source of social breakdown?

- A. Alterations in norms and values
- B. Single parent families
- C. Racism
- D. Poverty

Scoring and Explanation

- A. Correct
- B. Probably the most common wrong answer. Although single-parent families are identified as one of the issues related to social breakdown throughout the piece, the author overall identifies alterations in norms and values; alterations in norms and values lead to more single parent families, which lead to more crime and negative outcomes.
- C. The author specifically states “many of us think social breakdown is a result of racism and poverty, yet...” Test takers may not read carefully.
- D. See justification for answer C.

QUESTION 5

Objective 8: Student can correctly identify conclusions and/or main points of the piece.

What is the **main** point of this article?

- A. Alterations in norms and values are at the heart of economic and behavioral troubles.
- B. Children in single parent families are more likely to become involved with crime.
- C. Adolescents in single-parent families were almost twice as likely to have pulled a knife or a gun on someone in the past year.
- D. Promoting intact families is playing a “blame game” against single parent families.

Explanation and Scoring

- A. Correct.
- B. This is one of the points of the piece; however, it does not represent the main point. Test takers who cannot distinguish subpoints from the main point might select this answer.
- C. This is a piece of evidence, not the main point. Test takers who cannot distinguish evidence from the main point might select this answer.
- D. This is a main objection to the author’s point. Test takers who cannot identify opposing viewpoints in this article might select this answer.

QUESTION 6

Objective 3: Student can paraphrase and restate the theoretical frameworks utilized by the author

Thinking in terms of political orientation, how would you characterize this piece?

- A. Conservative
- B. Liberal
- C. Moderate
- D. Socialist

Explanation and Scoring

- A: Correct
- B: If someone does not understand political orientation or if they misinterpret the final paragraph of the reading.
- C: This is a very opinionated piece—it is not moderate in statement of opinion or in tone. Someone who does not understand the strength of the argument may choose this option.
- D: This represents both a false orientation (socialism is liberal) and a misinterpretation of the meaning of socialist. But the reading deals with social problems, so someone may try to “guess” by using the “social” in socialist.

Note: This question does require some degree of prior knowledge. However, since this is aimed at college students and since this question falls under the objective of being able to paraphrase and restate background information used by the author, I think this is a valid question.

QUESTION 7

Objective 2: *Student can explain the importance of the background information utilized by the author*

In the following statements, indicate whether you think they are *very important* for the author's **main** argument or *not very important*. Then provide one to two sentences of justification for your answer.

Statement 1: “Two decades of research produced a consensus among social scientists of both left and right that family structure has a serious impact on children...”

- A. Important for the author's **main** argument
- B. Not important for the author's **main** argument

Statement 2: “It took the media while to acknowledge that most of Katrina's victims were black.”

- A. Important for the author's **main** argument
- B. Not important for the author's **main** argument

Explanation and Scoring (4 points total)

Statement 1 (1 point):

- A. Correct
- B. If the test taker does not understand the main point, he/she may find this statement to be not very important.

Justification: (1 point)

Correct answers:

- The author's main point is that family structure impacts social disorder/crime/poverty, all of which affect children.
- Two decades of research is a lot of research—evidence
- Both “left and right” agree—that means it's not a one-sided ideological discussion

Incorrect answers:

- Any justification that does not provide evidence from the article
- Any unclear justification (i.e. “it's a good point” or “because it makes sense” type answers)

Statement 2 (1 point):

- A. Race is not important in this article—single parent homes and their relation to social disorder is important. However, an unsophisticated test taker may assume the article is somehow about race and find this comment to be important.
- B. Correct. (1 point)

Justification: (1 point)

Correct Answers:

- Race is not an important part of this article or the author’s main argument.
- Hurricane Katrina and her victims are not a main point of this article—the author used that to introduce his point.

Incorrect Answers

- Any justification that does not provide evidence from the article
- Any unclear justification (i.e. “it’s a good point” or “because it makes sense” type answers)

Scoring Notes:

- If the test taker correctly identifies the multiple choice but does not give correct justification, they receive one point.
- If the test taker does not identify the correct multiple choice, they receive no points, regardless of quality of justification.
- Maximum score for this question is four points.
- For best grading, all constructed responses should be read and graded by at least two individual graders. If there is a discrepancy, graders should discuss and reach consensus based on the critical thinking conceptual framework. See procedural issues for further explanation of scoring procedures.

QUESTION 8

Objective 3: *Student can paraphrase and restate the theoretical frameworks utilized by the author*

Which of the following best summarizes the author's general framework for his argument?

- A. Studies have found that children raised in single-parent households have more negative outcomes, as measured by crime, gang involvement and poverty.
- B. Studies have found that race is a major determinant of poverty and negative outcomes for children.
- C. Studies have found that children who are raised in crime-filled neighborhoods have more negative outcomes than children who live in safe neighborhoods.
- D. Studies have found that families that eat dinner together, regardless of family structure, are more likely to have positive outcomes than families that do not.

Explanation and Scoring

- A. Correct.
- B. Race is not a key component to the argument in this article; however, the opening line discusses Katrina's victims being black. A common mistake might be to infer race as a central theme throughout the article.
- C. Although this is a logical conclusion from the data, it does not represent the author's overall framework of the relationship between family structure and social breakdown.
- D. Logical conclusion from information presented; however, this is the complete ideological opposite of the author's framework and thus does not summarize the author's framework.

QUESTION 9

Objective 5: Student can accurately identify the information needed to draw plausible conclusions about the research

Which of the following pieces of information would be **most** useful in making the primary claims of this article stronger?

- A. Actual numbers and data from the studies cited by the author
- B. Research conducted by the author himself
- C. More research studies about the connection between race and poverty.
- D. First-hand interviews with single-parent families

Scoring and Explanation

- A. Correct.
- B. Although research conducted by the author might make the article and its arguments stronger, it would not necessarily do so. The author could conduct research on a different topic or could conduct poor research. This would not be the most useful addition to the article.
- C. Race and poverty are not key themes of the article; especially not race. Therefore, more studies about them would not really make the article stronger.
- D. First-hand interviews might add to the strength of the study; however, they would not be considered “most useful” in making the article stronger.

QUESTION 10

Objective 7: *Student can explain how the author uses data/evidence to support his or her claims.*

Which of the following is the *best* piece of evidence in support of the claim that “lightly parented adolescent males translates into chaos in neighborhoods and schools”?

- A. A study that found that out-of-wedlock births had a strong relationship to youth crime.
- B. A study that found that adolescents in married, two-biological parent families generally fare better than children in other family types.
- C. A study that found that eating dinner with your children is more important than the number or gender of adults in the home.
- D. A study that found that boys have the innate ability to raise themselves.

Scoring and Explanation

- A. Correct
- B. This is very close; however, the question asks for the BEST piece of evidence, and the first answer (A) is specific about out-of-wedlock births being related to crime. (B) simply indicates that children in married, two-biological parent families “fare better” which could be measured by wealth, life satisfaction, educational attainment, etc. It is not specific enough.
- C. This is evidence against the claim presented.
- D. This is evidence against the claim presented.

QUESTION 11

Objective 7: Student can explain how the author uses data/evidence to support his or her claims.

What is the purpose of citing five studies in the course of this article?

- A. To provide the necessary evidence to support the author's final conclusion
- B. To engage the reader with interesting statistics about crime and single-parent households.
- C. To show the reader how many studies find negative outcomes for children in single-parent homes.
- D. To challenge the reader to think about his/her ideas about positive and negative outcomes for children.

Scoring and Explanation

- A. Correct
- B. While that might be a stylistic goal, students are being asked to think about this from a critical perspective, and from that perspective, audience interest is not a key goal.
- C. This is correct; however, there is a more specific use for citing five studies and that is to support the final conclusion.
- D. The studies are not meant to challenge the reader; they are evidence. Someone might choose this one if they felt challenged or if they thought the author was trying to convict people on this issue.

QUESTION 12

Objective 7: *Student can explain how the author uses data/evidence to support his or her claims.*

Look at the following statements from the article. Then find one piece of supporting evidence for this point from the text and list it:

Statement 1: Children in single-parent homes are more likely to join gangs.

Statement 2: Mostly missing males lead to greater amount of neighborhood chaos.

Statement 3: The worst outcomes for children are determined by having a never-married mother.

Scoring and Explanation

Test takers have to locate one piece of evidence from the text and write it in. One point per statement; total of three points for the question. They DO NOT need to use direct quotes.

Statement 1 Correct Answers

“the single most important variable in gang involvement was found to be family structure;” “the greater the number of parents at home, the lower the level of gang involvement;” “living in a two-parent family reduced gang involvement by more than 50 percent.”

Statement 1 Incorrect Answers

Anything that does not deal with gangs and single-parent homes. If students give answers about single-parent homes and crime in general, do not give them a point.

Statement 2 Correct Answers

“two decades of research...family structure has a serious impact on children;” “the best outcomes for children...are almost invariably produced by married biological parents;” “neighborhoods with lots of out-of-wedlock births have lots of crime;” any of the comments from the findings section of the article.

Statement 2 Incorrect Answers

There are very few incorrect answers; if the test taker provides an answer that does not address males or neighborhood chaos, it would be wrong. If the test taker cited research from Peggy Drexler (at the end of the article) about non-intact families and boys not needing father figures, that would be wrong as well.

Statement 3 Correct Answers

“Adolescents in single-parent families were almost twice as likely to have pulled a knife or a gun on someone;” “any of the gang involvement statements from statement 1, “out-of-wedlock childbearing had a large effect on the rate of arrests for murder;” “adolescents in married, two-biological parent families generally fare better than children in any of the family types measured;” “Divorce rates had no relationship to violent crime rates, but out of wedlock births did”

Statement 3 Incorrect Answers

Anything off-topic (i.e. does not address single mothers or never-married mothers), anything that contradicts the statement.

Note: There is a difference between single-mothers and never-married mothers—a mother can be single and have been married previously. Therefore, the best answer for statement 3 is the answer about divorce rates and out of wedlock births. However, I do not feel that the author draws a sharp enough distinction between these two concepts throughout the article, nor do I think that, in a setting where we are looking for one “right” answer that we can penalize students for answering with evidence about single parents.

QUESTION 13

Objective 9: Student can judge the credibility of a source by recognizing and evaluating the factors relevant to assessing credibility.

Identify one source of credible authority in this piece and give one reason for their credibility.

Scoring and Explanation

Two points total: one point for identifying a source of authority, one point for giving a correct reason. If a student identifies a source of authority but no reason, it is worth one point.

Sources of authority (with reasons for credibility in parentheses):

- George Will (commentator, writing about Hurricane Katrina, famous columnist)
- Gary Bauer
- Thomas Bray (columnist for Detroit News).
- Institute for Marriage and Public Policy (Washington-based, research institute, did studies, produced empirical results)
- Cited studies (collected and used data, employed the scientific method, got their results published, studies accepted and promoted by the Institute for Marriage and Public Policy)
- Peggy Drexler (wrote a book, holds “ordinary” ideas among elites) (*note: this is a source of authority that does not agree with the author’s point of view; however, she still represents a source of authority in this piece*)

If students produce any other answers, the scorers can decide if they have merit; however, I believe these represent the entire list of sources of authority in this piece.

QUESTION 14

Objective 9: *Student can judge the credibility of a source by recognizing and evaluating the factors relevant to assessing credibility.*

Using the source of credible authority you identified, explain what makes that source credible? Why should others believe in that authority?

Scoring and Explanation

This is a constructed response question worth four points. The scoring rubric is as follows:

	Advanced (4)	Proficient (3)	Needs Improvement (2)	Does Not Meet Expectations (1)	No answer or off-topic (0)
General Rubric for Measuring Evaluation	Student can explain in detail his/her reasoning activities, and can fully explain all considerations used in forming his/her conclusions.	Student can explain reasoning activities and considerations used in forming his/her opinions, but without a high degree of detail and accuracy.	Student can explain some reasoning and considerations, but lacks a full ability to defend opinions and conclusions.	Student cannot defend reasoning or considerations	No answer given
Question-specific rubric	Student can explain clearly why the selected source is credible, and can provide clear justification, using examples from the text and well-constructed arguments.	Student can explain why a source is credible, but his/her answer is more vague and utilizes less sophisticated logic.	Student can give a general explanation for the credibility of a source, but shows no sophistication.	Student cannot explain why a source is credible.	

QUESTION 15

Objective 10: *Student can raise questions or objections to the conclusions presented and assess whether or not these points are a significant weakness in the argument.*

Which of the following is the most **valid** objection to the article?

- A. The author provides an overly simple answer to a complex social problem.
- B. The author does not use data to support his conclusions.
- C. The author does not have a clear explanation for the problem of poverty and social disorder.
- D. The author uses emotional language, not fact, to make his points.

Scoring and Explanation

- A. Correct
- B. The author uses a great deal of data to support his conclusions; a student who does not agree with his conclusions might choose this answer.
- C. The author has a clear explanation for the problem of poverty and social disorder, but a test taker might think he does not provide an explanation because the problem is complex or because the answer seems too easy.
- D. The author does not use emotional language often; however, he does make a few points with emotional language. This answer is plausible, but given the overall scope of the article, the most valid objection is the first one.

QUESTION 16

Objective 10: Student can raise questions or objections to the conclusions presented and assess whether or not these points are a significant weakness in the argument.

Which of the following represents a reasonable inference that can be drawn from the data?

- A. Higher rates of single parent families lead to greater neighborhood disorder
- B. Higher rates of poverty lead to greater neighborhood disorder.
- C. Higher rates of racism lead to greater neighborhood disorder.
- D. Higher rates of media coverage lead to greater neighborhood disorder.

Scoring and Explanation

- A. Correct.
- B. Poverty is not identified or highlighted a cause of anything in this piece. However, the author does discuss poverty as being one of the often-suggested reasons for social breakdown, so a test taker might mistakenly infer that to be a point the author himself is making.
- C. Racism is not discussed in this article; however, a test taker might assume the author is talking about racism due to several comments about race being “controlled for” or racism NOT being the cause.
- D. Media coverage is not really covered in this piece.

QUESTION 17

Objective 11: Student can determine which of several possible conclusions is most strongly warranted or supported by the information at hand, or which should be rejected, or regarded as less plausible by the information given

Which of the following statements relies more on personal feeling or values than on facts presented in the article?

- A. “But conventional wisdom is determined to ignore the evidence” (in paragraph 10)
- B. “If you want to avoid poverty, finish high school, don’t have kids in your teens, and get married.” (in paragraph 9)
- C. “Adolescents in single-parent families were almost twice as likely to have pulled a knife or a gun on someone in the past year.” (in paragraph 4)
- D. “Neighborhoods with lots of out-of-wedlock births have lots of crime.” (in paragraph 3)

Scoring and Explanation

- A. Correct.
- B. This sounds like a personal opinion; however, given the information presented in the article, this statement is backed up by evidence. Test takers who disagree with this statement on a personal level may feel this is relying on personal feelings/values
- C. This is a fact from the article; not a feeling/opinion.
- D. This is a fact from the article; not a feeling/opinion.

QUESTION 18

Objective 6: *Student can correctly identify and interpret data in the text*

What percentage of African-American births in Louisiana are to unmarried women?

- A. 76
- B. 80
- C. 90
- D. 100

Scoring and Explanation

- A. Correct
- B. 80% of births in New Orleans were to unmarried women; test takers who are not reading carefully might choose this option.
- C. Test takers who are not reading carefully might choose this option.
- D. The first paragraph talks about the large numbers of hurricane victims who were part of single parent families—a test taker might think that means everyone.

QUESTION 19

Objective 11: Student can determine which of several possible conclusions is most strongly warranted or supported by the information at hand, or which should be rejected, or regarded as less plausible by the information given

Aside from the primary conclusion of the author, what is another conclusion that could be drawn from the data?

- A. Children in single-parent homes have access to fewer economic and social resources.
- B. High crime areas produce more single-parent homes than low crime areas.
- C. Parents who are from single-parent homes are more likely to let their kids get involved with gangs.
- D. Parents who are not married are less concerned with living in dangerous neighborhoods than parents who are married.

Scoring and Explanation

- A. Correct.
- B. If a test taker does not understand the cause/effect logic, they might choose this answer, thinking the article was making a claim that high crime areas produce single parent homes, not that single parent homes are related to higher amounts of crime.
- C. This option may be selected by someone who does not read the data and interpretation carefully—parents are not more likely to let their children get involved with gangs, but there is a correlation between single-parent homes and gangs. However, that does not mean the parents are letting them join gangs.
- D. Again, unmarried parents are more likely to live in dangerous neighborhoods, but the data does not show that they are less concerned about living there. However, a test taker might infer that from the data since dangerous neighborhoods and single-parent homes seem to be connected.

QUESTION 20

Objective 2: Student can explain the importance of the background information utilized by the author

How does the fact that most of Hurricane Katrina's victims were unmarried women and their children relate to the author's **main** argument?

- A. It shows the prevalence of single parent homes in certain communities in America.
- B. It shows the prevalence of single parent homes among African-Americans.
- C. It shows the prevalence of single parent homes among hurricane victims.
- D. It shows the prevalence of single parent homes in the south.

Scoring and Explanation

- A. Correct.
- B. Although African-Americans were discussed in the Hurricane Katrina paragraph, race was not specifically related to the discussion of single-parent homes.
- C. There were single parent homes among hurricane victims; however, this is not related to the main argument. The main argument did not deal with the social lives of hurricane victims.
- D. The south was only mentioned in relation to hurricane victims; the author makes no specific claims about this.

QUESTION 21

Objective 11: Student can determine which of several possible conclusions is most strongly warranted or supported by the information at hand, or which should be rejected, or regarded as less plausible by the information given

Which of the following conclusions is most strongly warranted, given the information in the article?

- A. An increase in single parent homes is related to an increase social breakdown.
- B. Hurricane Katrina contributed to the rise of single mothers in Louisiana.
- C. Single parent homes contribute to greater amounts of out-of-wedlock births.
- D. Poverty and racism are the main causes of social breakdown.

Scoring and Explanation

- A. Correct.
- B. If a test taker does not understand the relation between Hurricane Katrina and single mothers, he/she might draw this conclusion.
- C. The author makes the claim that single parent homes create to greater amounts of social disorder, but does not make a causal claim about single parent homes leading to more out-of-wedlock births.
- D. The author states that poverty and racism are commonly stated causes of social breakdown; however, he specifically makes the claim that these are not the key causes and gives evidence to support his opinion.

QUESTION 22

Objective 1: Student can correctly identify the background information utilized by the author to build the main arguments.

What is the purpose of citing an article in paragraph 1 by George Will about adolescent males and chaos?

- A. To show that other authors write about the impact of single parent families on neighborhoods.
- B. To show that adolescent males are the cause of chaos in neighborhoods.
- C. To show that chaos in neighborhoods is the cause of forces beyond the control of residents in those neighborhoods.
- D. To show that other authors such as George Will believe that alterations in norms and values are at the heart of our nation's problems.

Scoring and Explanation

- A. Correct.
- B. That is the literal statement made by George Will; however, the question is asking the test taker to identify the *purpose* of the statement, not what the statement said.
- C. This might be something a test taker would infer from the first paragraph; again, it is not the purpose of the statement.
- D. This might be an option for a test taker who does not understand that George Will's statement does not necessarily indicate that he agrees with the author's main conclusion.

QUESTION 23

Objective 11: Student can determine which of several possible conclusions is most strongly warranted or supported by the information at hand, or which should be rejected, or regarded as less plausible by the information given

In this article, how do single parent homes relate to “an alteration of norms and values” that are “at the heart of economic and behavioral troubles?” Explain your answer.

	Advanced (4)	Proficient (3)	Needs Improvement (2)	Does Not Meet Expectations (1)	No Answer or Off-Topic Answer (0)
General Rubric for Inference	Student recognizes inferences and the evidence used or needed to make them plausible and can correctly determine which conclusions should be accepted or rejected based on the information at hand. Student can provide detailed justification of his/her reasoning	Student is able to recognize inferences and evidence, but with a lower degree of sophistication; and shows some ability to determine which conclusions should be accepted or rejected, but does not provide detailed justification.	Student can identify conclusions, but shows little ability to discern if they should be accepted or rejected. Student does not show that he/she knows how to draw inferences; can only recognize them in the readings or work of others	Student does not recognize nor draw inferences; student does not understand how to draw conclusions based on the information given.	No answer given or answer is completely off-topic.
Question-specific rubric	Student can clearly explain the relationship between single parent homes and norms and values. Student can demonstrate that he/she understands the conceptual framework and the conclusions that result from that framework.	Student demonstrates a basic understanding of the relationship between single parent homes and norms/values, but does not demonstrate a high level of sophistication. Student can link the conceptual framework and conclusions, but without a high degree of clarity.	Student shows some understanding of the relationship between single parent homes and norms/values, but cannot fully explain this relationship. Student does not demonstrate a clear understanding of the conceptual framework and conclusions.	Student does not demonstrate understanding of the relationship between single parent homes and norms/values.	No answer.

Notes to Graders:

- In this question, graders need to make sure that the test taker can link the author’s conclusions with his evidence—how he builds his argument. The biggest inference in the article is how these statistics about single-parent families and crime relate to an alteration in norms and values and how that relates to social breakdown. The test taker needs to be able to understand and explain this linkage.

QUESTION 24

Objective 11: Student can determine which of several possible conclusions is most strongly warranted or supported by the information at hand, or which should be rejected, or regarded as less plausible by the information given

Restate the author’s conclusion in your own words. Then determine if this conclusion is valid given the information provided in the article? You must provide justification for your answer.

Advanced (4)	Proficient (3)	Needs Improvement (2)	Does Not Meet Expectations (1)	No Answer or Off-Topic Answer (0)
Student correctly identifies conclusions and the evidence used or needed to make them plausible and can correctly determine which conclusions should be accepted or rejected based on the information at hand. Student can provide detailed justification of his/her reasoning	Student is able to identify conclusions and evidence, but with a lower degree of sophistication; and shows some ability to determine which conclusions should be accepted or rejected, but does not provide detailed justification.	Student can identify conclusions, but shows little ability to discern if they should be accepted or rejected. Student does not show that he/she knows how to draw inferences; can only recognize them in the readings or work of others	Student does not recognize conclusions; student does not understand how to evaluate if a conclusion should be accepted or rejected.	No answer given or answer is completely off-topic.

Notes to Graders:

- Make sure the test taker can correctly identify the conclusions
- In general, most test takers should say that this is a valid conclusion, because with the information given, it makes sense. However, one might question the conclusion based on a critique of the evidence provided or on outside information or knowledge.
- In this question, graders are looking for test taker ability to defend their reasoning—if they say the conclusion is not valid, then they must have solid reasons to substantiate this.

Scoring: 1 point for restating the conclusion
 4 points for the answer.

QUESTION 25

Objective 12: *Student can give reasons for accepting the claims or assertions of the study and can defend their reasoning regarding the strength/weakness of the conclusions, providing evidence upon which their reasoning was based.*

Do you agree with the primary conclusion of the study? If yes, provide specific examples from the text or from other sources (personal experience, etc.). If no, propose an alternate conclusion and explain your conclusion with examples from the text.

Advanced (4)	Proficient (3)	Needs Improvement (2)	Does not meet expectation	No answer or off-topic
Student can explain in detail his/her reasoning activities, and can fully explain all considerations used in forming his/her conclusions. Student can explain in detail his/her reasons for accepting or rejecting an assertion.	Student can explain reasoning activities and considerations used in forming his/her opinions, but without a high degree of detail and accuracy. Student can identify reasons for accepting/rejecting an assertion, but without a high degree of evidence.	Student can explain some reasoning and considerations, but lacks a full ability to defend opinions and conclusions.	Student cannot defend reasoning or considerations.	No answer or off-topic answer

Notes to Grader:

- This is a difficult question to grade, but the specific skill being tested is explanation, which means test takers have to have the opportunity to explain their reasoning and conclusions.
- Students can agree or disagree; they must explain their reasoning activities and considerations used to form their conclusions. They must be able to do this in detail.
- There is not necessarily a “right” or “wrong” answer to this question—the scoring is based upon the test taker’s ability to explain his/her reasoning about the his/her conclusions and thought processes. This is why there is not a “question specific” dimension to the rubric—the rubric for explanation is used.

CRITICAL THINKING

Definition

Based on the Delphi Report definition and conceptualization of critical thinking.

Definition: Critical thinking is purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or contextual considerations upon which that judgment is based.

Cognitive Skills and Subskills of Critical Thinking

1. Interpretation
 - a. Categorization
 - b. Decoding Significance
 - c. Clarifying Meaning

2. Analysis
 - a. Examining Ideas
 - b. Identifying Arguments
 - c. Analyzing Arguments

3. Evaluation
 - a. Assessing Claims
 - b. Assessing Arguments

4. Inference
 - a. Querying Evidence
 - b. Conjecturing Alternatives
 - c. Drawing Conclusions

5. Explanation
 - a. Stating Results
 - b. Justifying Procedures
 - c. Presenting Arguments

6. Self-Regulation (*included in Delphi framework; not included in ours*)
 - a. Self-examination
 - b. Self-correction